

## Any Progress in Eliminating Shortage of Semiconductors?

Supply capacity of semiconductors for automobiles expected to recover in 2023.

Economic Research Dept. Kazuma Kishikawa

## Summary

- Since 2021, the decline in automobile production due to the shortage of semiconductors has had downward pressure on the Japanese economy. At present, however, there are signs of change in semiconductor trends, such as a clear decline in spot prices for DRAM, a type of semiconductor for PCs, smartphones, and other devices. If we actually analyze the supply and demand situation of semiconductors based on macro data, while supply has firmed up at the present time, demand peaked out in 2021, which seems to have pushed up the inventory ratio. In addition to the lack of excitement in domestic production of products using semiconductors, the weakening of inquiries about semiconductors overseas seems to be a factor.
- However, the easing up of the supply and demand situation for semiconductors is limited to certain products. Supply and demand for semiconductors for automobiles is currently tight, and Japanese household demand for new cars, which have been postponed due to production cutbacks, is estimated to be about 690,000 units as of the end of July 2022 (at a value of around 1.7 tril yen). If over-ordering of some semiconductors due to the bullwhip effect is eliminated, the production capacity of semiconductors will ease up for automotive applications. The shortage of semiconductors for automobiles is expected to ease from the autumn of 2022 and resolve by the end of 2023, and rapid recovery production of automobiles is expected to support the domestic economy.

## Attention

This report is a summary translation. The official document is only in Japanese.